blended and added slowly to Part A, and mixing was continued until a smooth blend was obtained. Part of the water of Part A was withheld and added during the addition of Part B.

The resulting walljoint compounds of this invention were tested for certain physical properties and the results are tabulated in Table IX, below:

TABLE IX

	Brookfield Viscosity (cps @ 25° C.)			
LEC*	2.5 RPM Spindle TE, Heliopath Viscometer	Non Leveling	Slip	Water Retention
1	2,000,000	Good	Good	Good
Blank	600,000	Poor	Poor	Poor

*See Table II

Paper Coatings

Paper coatings prepared using copolymers of this invention offer an improvement over prior coatings containing thickeners, especially as regards efficiency, i.e. the amount of thickener required to increase the viscosity of the coatings to useful levels. In this regard, the overall rheology of coatings of both the low and high shear type containing thickeners of this invention were studied. The fluid retention of the coatings was compared using an "S. D. Warren" tester, and electronic water retention (EWR) in seconds was measured. The EWR values have a bearing on the overall usefulness of a particular thickener, regardless of the amount used in the coating, and provides evidence of the runability of the coating. The results of the tests are presented in Tables X and XI.

TABLE X

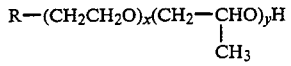
			Viscosity, 3000 cps @ 25° C.			
	Thickener Parts by	Brookfield Viscosity-20 RPM	Fluid Retention EWR, Sec.		Kaltec*** High Shear	Weight Percent Dry Polymer on 100 Parts
LEC**	Weight (Dry)	(cps @ 25° C.)	30#/ream	#5 Whatman	Viscosity, cm.	Coating Clay
		Paper Coating Formulation*				
1	0.2	1100	23	54	5.1	0.55
	0.4	2300				
	0.6	4000				
	0.8	—				
Control	(no thickener)	100	6	22	NR	—
		Paper Coating Formulation+				
1	0.2	100	28	63	8.9	1.1
	0.4	500				
	0.6	1000				
	0.8	2100				
Control	(no thickener)	100	6	22	NR	—

*Dow 620 butadiene-stryene latex 15.0 dry parts, number one coating clay 100 parts solids, 50% coating solids, pH 9.0 by addition of ammonium hydroxide.
+National Starch Company polyvinyl acetate latex No. 1105 15.0 dry parts, number one coating clay 100 solid parts, 50% solid coating, pH 9.0 by addition of ammonium hydroxide.
**See Table II
***"E" Bob, 4400 rpm; 200,000 spring set.

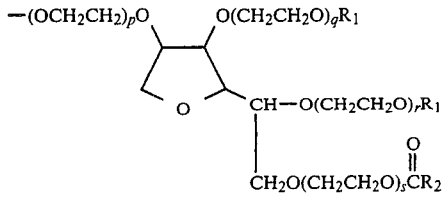
I claim:

1. A copolymer obtained by aqueous emulsion copolymerization of a monomer system comprising

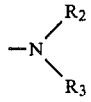
(A) about 1 to about 25 percent of at least one nonionic urethane monomer which is the urethane reaction product of a monoethylenically unsaturated monoisocyanate with a nonionic surfactant of the formula:



in which x is an integer of from 1 to 150 and y is an integer of from 0 to 40 when R a sorbitan fatty ester of the formula

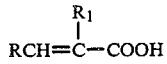


where each of p, q, r and s is an integer and the sum of said integers is from 0 to 100, R_1 is H or $-COR_2$ and R_2 is alkyl, alkylphenyl, or dialkylphenyl 5 to 30 carbon atoms; or x and y are each integers of from 0 to 40 when R is $-NH(CH_2)_3O-R_3$, or



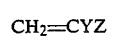
where R_2 is H or R_3, and R_3 is alkyl, alkylphenyl, or dialkylphenyl of from 5 to 30 carbon atoms;

(B) about 5 to about 70 percent of a copolymerizable α,β-ethylenically unsaturated carboxylic acid monomer of the formula



where R is H and R_1 is H, an alkyl group containing from 1 to 4 carbon atoms, or $-CH_2COOX$; R is $-COOX$ and R_1 is H, and X is H or an alkyl group containing from 1 to 4 carbon atoms,

(C) about 10 to to about 90 percent of at least one nonionic, copolymerizable α,β-ethylenically unsaturated monomer of the formula



where Y is H and Z is CN, Cl, —COOR, C_6H_4R,